

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
15 September 2005 (15.09.2005)

PCT

(10) International Publication Number
WO 2005/084680 A1

(51) International Patent Classification⁷: **A61K 31/557**,
31/12, 35/78

(21) International Application Number:
PCT/US2005/006216

(22) International Filing Date: 26 February 2005 (26.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/789,814 27 February 2004 (27.02.2004) US

(71) Applicant (for all designated States except US):
METAPROTEOMICS, LLC [US/US]; 100 Avenida
La Pata, San Clemente, CA 96273 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BABISH, John, G.**;
508 White Church Road, Brooktondale, NY 14817 (US).
TRIPP, Matthew, L. [US/US]; 4202 71st Avenue Court
NW, Gig Harbour, WA 98335 (US). **BLAND, Jeffrey, S.**
[US/US]; 957 11th Lane, Fox Island, WA 98333 (US).

(74) Agent: **LEVI-MINZI, Simona, A.**; McDermott Will &
Emery LLP, 201 South Biscayne Boulevard, Suite 2200,
Miami, FL 33131 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- with amended claims

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: SYNERGISTIC ANTI-INFLAMMATORY PHARMACEUTICAL COMPOSITIONS AND METHODS OF USE

(57) Abstract: The invention provides a composition comprising a reduced isoalpha acid (RIAA) and isoalpha acid (IAA) isolated from hops, wherein the RIAA and IAA are in a ratio of about 3:1 to about 1:10. The invention also provides a method of reducing inflammation by administering a composition comprising a reduced isoalpha acid (RIAA) and isoalpha acid (IAA) isolated from hops, wherein the RIAA and IAA are in a ratio of, about 3:1 to about 1:10.



WO 2005/084680 A1